

IN THE CLAIMS

Claim 1 (Cancelled)

Claims 2 - 3 (Cancelled)

4. (Currently amended) The method ~~as claimed in claim 1 of claim 39,~~ wherein in the iterative determining process ~~successively automatically reading second item types~~ comprises successively automatically reading only second-type items ~~types~~ not previously stored in the first database.

5. (Currently amended) The method ~~as claimed in claim 1 of claim 39,~~ wherein said first database further comprises modules; and, said method further comprising the step of storing said first-type items ~~types~~ in said modules.

6. (Currently amended) The method ~~as claimed in~~ of claim 5, further comprising: configuring each said module to perform operations on said ~~data associated with said first item types~~ first-type items having at least one similar characteristic which are stored in the ~~the~~ [[a]] same said module.

7. (Currently amended) The method ~~as claimed in claim 1 of claim 39,~~ further comprising the step of sorting said ~~at least one first item type and said at least two second item types, said first item associated data, and said second item associated data~~ first- and second- type items ~~as said at least one first item type and said at least two second item types, and said second item associated data~~ they are stored in the first database.

8. (Currently amended) The method ~~as claimed in claim 1 of claim 39,~~ wherein said first- and second- type items ~~at least one first item type and said at least two second item types~~ further comprise predetermined items; and, said method further comprising: ~~the system producing an output indication if said predetermined items are stored in the first database.~~

9. (Currently amended) The method ~~as claimed in claim 1~~ of claim 39, further comprising wherein the step of ~~each second-type item is associated with an item determinant which specifies each prerequisite item for evaluation of the second-type item, determining whether a second item type from said at least two second item types can be stored in the first database by associating the second item type with an item determinant which specifies the or each prerequisite item for evaluation of the second item type.~~

10. (Currently amended) The method ~~as claimed in~~ of claim 9, further comprising a ~~determining~~ ant step of searching the first database for ~~the or~~ each prerequisite item of the second -type item-type.

11. (Currently amended) The method ~~as claimed in~~ of claim 10, wherein the determining step includes a Boolean operation which produces a true or false result depending on whether ~~the or~~ each prerequisite item is located in the first database.

12. (Currently amended) The method ~~as claimed in~~ of claim 11, wherein the first database includes one or more separate storage areas.

13. (Currently amended) The method ~~as claimed in claim 12~~ of claim 11, wherein the result of said determining step is true if ~~the or~~ each prerequisite item is located in the first database.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Currently amended) The method ~~as claimed in~~ of claim 13, ~~15~~ further comprising the step of adding storing a second type item ~~type~~ from said at least ~~two second item types~~ to in the first database if the associated item determinant evaluates to true.

18. (Currently amended) The method ~~as claimed in~~ of claim 17, further comprising the step of providing a consolidated storage array for storing items of the second type and for evaluating said item determinants.

19. (Currently amended) The method ~~as claimed in~~ of claim 18, further comprising the step of evaluating the item determinant for each said second type item ~~type~~ not stored in the first database.

20. (Cancelled)

21. (Currently amended) The method ~~as claimed in~~ of claim 19, ~~20~~ further comprising the step of storing said second type items types in a second database if associated prerequisite items for said second type items types are not located in the first database.

22. (Currently amended) The method ~~as claimed in~~ of claim 21, further comprising the step of repeating the evaluating step for any said second type items type in the second database.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Currently amended) The method ~~as claimed in~~ of claim 22, 23 wherein the second database comprises a consolidated instance array.

27. (Currently amended) The method ~~as claimed in~~ of claim 26, further comprising the step of adding said second-type items for which the item determinants evaluate to false to the second database.

28. (Currently amended) The method ~~as claimed in~~ of claim 27, wherein any said second-type item stored in ~~added to~~ the first database after the evaluating step is performed on the second database ~~results in the removal of said added second item~~ is removed from the second database.

29. (Currently amended) The method ~~as claimed in~~ of claim 28, wherein the evaluation step is repeated on said second-type items ~~types~~ remaining in the second database at least one further time after any ~~if the remaining second-type~~ item ~~type~~ is transferred to the first database.

30. (Currently amended) The method ~~as claimed in~~ of claim 39, 29 further comprising the step of storing formulae for said second-type items ~~types~~ in a formula database and evaluating each said first and/or second-type item ~~type~~ stored in the first database in accordance with an associated formula stored in a formula database, and associating with each said second-type item all of said first- and/or second- type item types required before the said second-type item can be determined.

31. (Cancelled)

32. (Cancelled)

33. (Currently amended) The method ~~as claimed in claim 1~~ of claim 39, wherein the computer system determines which second-type items ~~types~~ to read by

determining which second-type items ~~types~~ could exist, based on data in the first database.

34. (Currently amended) The method ~~as claimed in claim 1 of claim 39~~, wherein the spreadsheet model specification includes said at least two second-type items ~~types~~ by at least one of: listing a plurality of second-type items ~~types~~; or, defining one or more classes of the second-type item-type, from which a number of unambiguously identifiable second-type items ~~types~~ can be determined.

35. (Cancelled)

36. (Currently amended) The method according to claim 18, wherein one or more iterations of the iterative determining process comprises generating one or more putative second-type items ~~types~~ for subsequent reading and assessment.

37. (Currently amended) The method ~~as claimed in claim 1 of claim 39~~, wherein at least one putative second-type item-type is provided which can be assessed as being able to be determined only if: the first database includes one or more prerequisite items necessary to determine said second-type item-type; and the first database does not include one or more other specific first or second type items ~~types~~, not being prerequisite items of said putative second-type item-type.

38. (Currently amended) A computer implemented method for processing data for a spreadsheet system model, including the steps of:

- providing a spreadsheet model specification in a computer system, the spreadsheet model specification including a plurality of types of item, in respect of which entries may potentially be provided in a spreadsheet to which the spreadsheet system model relates, the types of item including:

- at least one first-type item-type ~~wherein first item associated data is for which~~ input data is input into the computer system; and

at least one putative second-type item type wherein second-type items associated data can be obtained are putatively determinable from an operations performed on stored data stored in a first database, associated with at least one of said first or second type items types, stored in a first database, and wherein second-type items are included in the database if ascertained to be determinable types are not input data;

automatically searching, using a processor for the computer system, the input data for at least one a first-type item type;

automatically storing data associated with said at least one first-type item type found by the searching step, in the first database,

automatically performing an iterative determining process, using the processor, for to ascertain determining whether the first database includes one or more prerequisite items necessary to determine each of a number of a putative second-type item types, the iterative determining process comprising performing a plurality of iterations, wherein:

(a) each iteration of the determining process comprises successively automatically reading a putative second-type item types; associating each respective that second-type item type with an item determinant which specifies the or each prerequisite item for evaluation of said respective that second-type item type; for each second type item, searching the first database for the or each prerequisite item for said each respective second-type item type; applying a Boolean operation which produces a true or false result depending on whether the or each prerequisite item is located in the first database; and storing in the first database the each second-type item type for which if the item determinant is true; and

(b) the iterative determining process performs repeated iterations according to step (a) indefinitely until an iteration evaluates the determinants of all second-type items types not stored in the first database in previous iterations as false, wherein, at the termination of the iterative determining process, the storage of an item type in the first database is an indication that the stored item

~~type may usefully be included in a spreadsheet in accordance with the spreadsheet system model; and~~

automatically outputting, using the processor, an indication that the spreadsheet system model can be produced if items of the model specification are stored into the first database.

39. (New) A computer implemented method for processing data for a spreadsheet system model, comprising:

providing a spreadsheet model specification in a computer system with a plurality of item types which may potentially be provided in the spreadsheet, including:

at least one first-type item for which input data is put into the computer system to indicate that said first-type item can be included in the spreadsheet; and

at least one second-type item, wherein second-type items are putatively determinable from one or more operations performed on data stored in a first database, and wherein second-type items are included in the spreadsheet if ascertained to be determinable;

putting said input data into the system;

searching, using a processor for the computer system, the input data for a first-type item;

storing said first-type item found by the searching step in the first database,

performing an iterative process to ascertain whether the first database includes one or more prerequisite items needed to determine a putative second-type item, wherein:

(a) each iteration comprises successively reading putative second-type items and ascertaining whether the first database includes prerequisite items sufficient to determine said putative second-type item, and if the first database does include prerequisite items sufficient to determine said second-type item, automatically storing that second-type item in the first database, such that said

second-type item becomes available as a potential prerequisite item for other putative second-type items in subsequent iterations;

(b) the iterative process is automatically terminated when an iteration fails to store a second-type item in the first database which was not stored there in a previous iteration, thus indicating that all putative second-type items logically determinable from said stored data have been determined and stored in the first database; and

(c) re-assessing in each iteration putative second-type items that could not be determined in previous iterations due to lack of a prerequisite item, by taking into account second-type items stored in the first database by previous iterations; and outputting an indication that the spreadsheet system model can be produced if items of the model specification are stored in the first database.

40. (New) The method of claim 39, including at least two second-type items.

41. (New) The method of claim 39, wherein storing an item in the first database comprises storing data associated with that item in the first database, said data associated with that item being a name or other flag indicative of the particular item.

42. (New) The method of claim 39, implemented by providing a model specification which is hard coded into the computer program.